

CALIFORNIA STATE BOARD OF HEALTH

Weekly

Bulletin

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THE TOURIST TYPHOID CARRIER PROBLEM.

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Typhoid fever is today chiefly contracted, not wholesale and from water, as it was a few years ago, but retail and from carriers. Only five per cent of the amount of typhoid exists now that existed fifteen years ago; but remember, typhoid patients now, although far less numerous than then, are just as sick as ever, and, if they die, are just as dead. Therefore, though the chances of contracting typhoid now are but one-twentieth of those in the past, it is wise to know how to avoid having it at all.

The typhoid carrier is a *perfectly well person*, who has had the misfortune to become infested with the typhoid germ in such a manner that, although the typhoid carrier himself is perfectly well, he can pass on to his associates the typhoid germs, which are quite harmless to him; but which in his associates often produce disease and death.

The typhoid carrier of today is no more common than he was fifteen to fifty years ago, but since the wholesale methods of spread through water have practically gone out of business, he has become far more prominent; in fact, he does almost all of the five per cent of the old business that still is done.

Such persons are far from rare; one state has no less than one hundred and twenty-nine typhoid carriers on its "roll of dangerous persons." Unless most

carefully instructed and supervised, such persons are a constant menace directly to their everyday associates; and, if their discharges enter a water supply or a milk supply or a food supply or are carried by flies, any one of the latter may give rise to a real old-fashioned typhoid epidemic on a large scale.

All public health people are interested in, and watch carefully with both eyes, all known typhoid carriers who are at large in the community; but they dread still more the unknown ones; since these, not yet identified and brought under supervision, not aware themselves of the dangerous germs they carry, are just the ones most likely to be careless and therefore to spread the disease.

Any tourist, like any other citizen, may himself, all unknowingly, be a typhoid carrier and so carry his typhoid germs into the communities or camps or trails that he visits. He may pass on his typhoid germs to his fellow-campers, to casual acquaintances, to wayside guests; or, if careless of his discharges, to the water of the streams or lakes he visits. If he is a good cook he will be in great demand in camp and thus have especial opportunity, unknowingly of course, to infect those whom he serves through the food he handles.

True, carriers are not so common that any large number of tourists are likely to be carriers, but some tourists surely are; hence, precautions by tourists in

entering into close association with stranger tourists (which is wise on many other grounds) is wise on this one also.

The community, while welcoming the tourist warmly, should not forget that some of the tourists are dangerous to the community, the community water supply, etc.; and in furnishing camping facilities to tourists, should be careful not to furnish also infection facilities to their germs. For instance, tourist camps should never be located near an open public reservoir or on a stream, especially one used for a water supply, unless every precaution to avoid polluting the stream is taken by all concerned.

Conversely, the tourist must himself consider the communities he encounters, the tradesmen, the tourist comrades he may meet, as possible sources of infection to himself and to his fellow travelers; as to other diseases, of course, but particularly as to typhoid.

While these warnings against typhoid carriers are here applied especially to tourists, all other travelers, harvest hands, tramps, are equally to be regarded with suspicion. Harvest hands, particularly, often share the family meals at the farmer's home where they are working; and, if typhoid carriers exist amongst the hands, have in the past and may in the future, introduce all unwillingly disease, sorrow and death during their stay.

The typhoid carrier is dangerous, exactly like the typhoid case, through the typhoid germ-laden discharges of his bladder and bowel. These discharges may be carelessly admitted to a stream, pond or lake, etc.; and the waters thus contaminated with the typhoid germs may be with equal carelessness used for drinking purposes by other tourists or even by some community situated on the banks.

But besides the wholesale infection of a water supply by these discharges in bulk, the typhoid carrier as often or even more often transfers his typhoid germs to other people *on his hands*. Few people fail, sometime or other during each day, to get upon one hand or the other some of one or other of these discharges, and some people fail, every day, to remove such discharges by immediate and most diligent washing. Bad enough as this may seem when ordinary healthy discharges are concerned, it becomes dangerous, even deadly, when typhoid-laden discharges are thus entered upon an open road to other people's mouths. Consider how such typhoid-infected hands may be used for milking cows, for handling other of your food, or your cups or spoons;

indeed, to shake hands with you and so infect your hand, which will soon go to your own mouth for some purpose or other.

Again, such discharges, if deposited in non-fly-proof toilets or left uncovered in the open by careless campers, may easily be carried by flies to neighboring houses or camps and there deposited in the milk or on the bread or cake or jam visited by the flies.

PRECAUTIONS

These are for the tourist who is a typhoid carrier and knows it—but also for the one who is a typhoid carrier and doesn't know it; why not for the tourist who isn't a typhoid carrier at all—*why not for all persons?*

1. Do not let the discharges of your bladder or bowel contaminate anything from which any other person may unwittingly get your germs, whether they are typhoid germs or not.

Therefore, on your tours, use proper toilets provided for the purpose where possible, and wash your hands thoroughly after use.

OR

When you make your own camp provide, *at once*, the moment your tent is up, a small pit for your discharges, covering each deposit therein, whether from bladder or bowel, with earth. (A sheet, 6 x 25 feet, wound about four convenient trees or stakes, is useful as a screen.)

2. When *en route*, discharges of the bladder may be safely placed in any hollow where there is no flow over the surface (except in a limestone country). Bowel discharges should be deposited in a small pit and covered with earth as before. In a limestone country, chloride of lime should be deposited in the hollow first and the discharges deposited on the lime, then covered.

CONVERSELY.

Encourage other campers to protect *you*, as carefully as you protect them. Do not let strangers handle your food after it is cooked. Boil all water, unless obtained from a good public water supply or a well (except in limestone country) and boil all milk; unless pasteurized or canned; thoroughly wash and then peel all fruits or vegetables to be eaten raw. Take no chances—Safety First!

CHLORINATING WATER.

It is sometimes inconvenient, even impracticable, to boil water of which you are suspicious, yet which you must use or

go without. The following is a simple, rapid method of killing typhoid germs present in water.

A solution of chloride of lime (bleaching powder or calcium hypochlorite) or of sodium hypochlorite is made up by a druggist for you and carried by you in a brown glass bottle. The strength should be such that say five drops added to a glass full of water will equal one part in a million of chlorine. A medicine dropper may be carried to manage the drops. Add the five drops as above to the glass full of water and let it stand twenty minutes before drinking it. Larger amounts of water may be similarly treated by adding larger amounts of the solution in the same proportions.

IMMUNITY.

You may, or course, have yourself immunized against typhoid, as our soldiers were during the war. It is a very simple process and protects you for about two years. Ask your physician about it. He will tell you the details and immunize you if you wish.



The savage desert tribes of Africa pay no taxes, so it is a mystery what makes them savage.—S. F. Chronicle.



California Offers Help To Louisiana.

In a telegraph to Dr. Oscar Dowling, President of the Louisiana State Board of Health, the California State Board of Health has tendered the services of its staff for use in the flood-stricken areas of the southern state. Dr. Dowling replied, expressing the gratitude of the Louisiana board and stating that if the emergency required it advantage would be taken, later, of the California offer.



A taxpayer brought suit recently—in a supposedly enlightened community, too—to stop the school board from paying for dental inspection and care in the public schools. The high light of the suit was the testimony of a school principal, to the effect:

She found an improvement of 99.8 per cent in the mental ability of school children who were taught to take proper care of their teeth. The percentage was arrived at by painstaking observation and checking up of their work, before and after the dental instruction.

Call it 100 per cent improvement. Or call it half that much, if you like. If it will effect only 25 per cent improvement, or only 10 per cent, in the mental keenness and studious accomplishment of the pupils such work is well worth paying for. Still more valuable, possibly, is the better morale that is likely to go with a clean well kept outfit of teeth.—Berkeley Gazette.

LIST OF DISEASES REPORTABLE BY LAW.

ANTHRAX
BERI-BERI
BOTULISM
CEREBROSPINAL MENINGITIS (Epidemic)
CHICKENPOX
CHOLERA, ASIATIC
DENGUE
DIPHTHERIA
DYSENTERY
ENCEPHALITIS (Epidemic)
ERYSIPELAS
FLUKES
FOOD POISONING
GERMAN MEASLES
GLANDERS
GONOCOCCUS INFECTION*
HOOKWORM
INFLUENZA
JAUNDICE, INFECTIOUS
LEPROSY
MALARIA
MEASLES

MUMPS
OPHTHALMIA NEONATORUM
PARATYPHOID FEVER
PELLAGRA
PLAGUE
PNEUMONIA
POLIOMYELITIS
RABIES
ROCKY MOUNTAIN SPOTTED (or Tick) FEVER
SCARLET FEVER
SMALLPOX
SYPHILIS*
TETANUS
TRACHOMA
TUBERCULOSIS
TYPHOID FEVER
TYPHUS FEVER
WHOOPING COUGH
YELLOW FEVER

QUARANTINABLE DISEASES.

CEREBROSPINAL MENINGITIS (Epidemic)
CHOLERA, ASIATIC
DIPHTHERIA
ENCEPHALITIS (Epidemic)
LEPROSY
PLAGUE

POLIOMYELITIS
SCARLET FEVER
SMALLPOX
TYPHOID FEVER
TYPHUS FEVER
YELLOW FEVER

*Reported by office number. Name and address not required.



New Haven, Conn., seems to have found a pleasant and effective way to spread the gospel of diphtheria prevention. The health officer sends to each baby in the city on his first birthday a birthday card, with a letter to the parents calling attention to the importance of protecting the child against diphtheria. The city reported but one death from the disease during 1926.

In this connection, the Metropolitan Life Insurance Company reports for the year 1926 a new low death rate for diphtheria among its policyholders. It asserts that there is no good reason why the mortality from this scourge of childhood should not continue to decrease until it becomes negligible.



MORBIDITY.*

Diphtheria.

128 cases of diphtheria have been reported, as follows: Berkeley 1, Oakland 10, Butte County 1, Chico 3, Callexico 1, Kings County 1, Los Angeles County 13, Burbank 2, Huntington Park 2, Long Beach 4, Los Angeles 53, Montebello 2, San Fernando 2, Santa Monica 1, Whittier 1, Lynwood 1, Mill Valley 1, Sacramento County 1, Sacramento 3, San Francisco 18, San Joaquin County 1, San Mateo County 2, Redwood City 1, Los Gatos 1, Red Bluff 1, Marysville 1.

Scarlet Fever.

117 cases of scarlet fever have been reported, as follows: Berkeley 4, Oakland 16, Butte County 3, Tehachapi 1, Los Angeles County 6, Arcadia 1, Glendale 2, Huntington Park 1, Long Beach 2, Los Angeles 27, Monrovia 1, Santa Monica 1, Whittier 1, Maywood 1, Marin County 1, Sausalito 1, Grass Valley 1, Anaheim 2, Huntington Beach 2, Orange 2, Santa Ana 2, San Diego 3, San Francisco 21, San Joaquin County 1, Santa Barbara County 1, Santa Clara County 4,

*From reports received on May 30th and 31st, for week ending May 28th.

Morgan Hill 1, San Jose 6, Red Bluff 1, Sonora 1.

Smallpox.

17 cases of smallpox have been reported, as follows: Oakland 9, Orange 1, Sacramento 5, San Francisco 1, Santa Barbara County 1.

Typhoid Fever.

12 cases of typhoid fever have been reported, as follows: Martinez 1, Inyo County 1, Kern County 2, Lake County 2, Los Angeles County 1, Burbank 1, Marin County 1, Sacramento 1, San Francisco 2.

Measles.

924 cases of measles have been reported, as follows: Berkeley 10, Oakland 33, Butte County 12, Kings County 2, Los Angeles County 82, Arcadia 1, Avalon 1, Beverly Hills 3, Burbank 6, Claremont 3, Compton 11, Glendale 76, Glendora 1, Hermosa Beach 1, La Verne 1, Long Beach 18, Los Angeles 137, Monrovia 5, Montebello 1, Pomona 24, San Fernando 3, Santa Monica 7, Sierra Madre 1, South Pasadena 2, Whittier 1, Lynwood 4, Hawthorne 4, Maywood 1, Madera County 1, Marin County 1, Sausalito 4, Monterey County 1, Carmel 5, Grass Valley 1, Orange County 18, Anaheim 1, Fullerton 1, Newport Beach 13, Orange 28, Santa Ana 17, La Habra 1, Lincoln 1, Riverside County 36, Riverside 39, Sacramento County 1, Sacramento 7, Ontario 16, San Diego County 53, Chula Vista 6,

El Cajon 1, La Mesa 1, San Diego 109, San Francisco 42, San Joaquin County 2, Stockton 1, San Luis Obispo County 12, Arroyo Grande 11, Burlingame 2, Hillsborough 1, San Mateo 5, Santa Barbara County 2, Santa Clara County 6, Watsonville 3, Gilroy 1, Palo Alto 2, Solano County 1, Dinuba 5, Porterville 10, Visalia 1, Santa Paula 4.

Whooping Cough.

186 cases of whooping cough have been reported, as follows: Berkeley 18, Oakland 49, Butte County 5, Bakersfield 1, Los Angeles County 10, Arcadia 1, Burbank 3, Glendale 4, Long Beach 8, Los Angeles 17, Redondo Beach 2, Monterey County 5, Anaheim 2, La Habra 2, San Diego 31, San Francisco 22, San Joaquin County 1, Santa Barbara County 2, Tehama County 2, Porterville 1.

Epidemic Meningitis.

9 cases of epidemic meningitis have been reported, as follows: Oakland 1, Los Angeles County 1, Los Angeles 3, Sacramento 2, San Diego 1, California 1.

Poliomyelitis.

4 cases of poliomyelitis have been reported, as follows: Oakland 1, Kern County 2, Tulare County 1.

Epidemic Encephalitis.

San Francisco reported one case of epidemic encephalitis.

COMMUNICABLE DISEASE REPORTS.

Disease	1927				1926			
	Week ending			Reports for week ending May 28 received by May 31	Week ending			Reports for week ending May 29 received by June 1
	May 7	May 14	May 21		May 8	May 15	May 22	
Anthrax.....	0	0	0	0	0	1	1	0
Botulism.....	0	0	0	0	0	0	0	0
Chickenpox.....	429	453	394	302	236	253	216	190
Diphtheria.....	130	105	125	128	106	110	125	93
Dysentery (Bacillary).....	0	0	1	0	0	4	1	1
Encephalitis (Epidemic).....	3	0	1	1	1	2	3	3
Gonococcus Infection.....	93	101	110	114	124	52	168	150
Influenza.....	40	20	23	19	19	27	10	20
Jaundice (Epidemic).....	0	0	0	0	0	0	0	0
Leprosy.....	1	2	0	0	1	0	1	0
Malaria.....	1	0	0	0	1	0	5	0
Measles.....	2212	1634	1690	924	468	496	509	430
Meningitis (Epidemic).....	4	4	5	9	3	2	6	4
Mumps.....	259	228	293	225	293	327	311	207
Paratyphoid Fever.....	1	1	1	0	0	2	0	0
Pneumonia (Lobar).....	55	28	104	40	38	38	36	29
Poliomyelitis.....	4	5	4	4	1	2	2	7
Rabies (Animal).....	7	13	1	4	4	7	9	6
Rabies (Human).....	0	0	0	0	0	0	0	0
Rocky Mt. Spotted Fever.....	0	0	0	0	0	0	0	1
Scarlet Fever.....	189	220	174	117	130	149	145	130
Smallpox.....	27	43	26	17	37	42	46	14
Syphilis.....	189	96	92	95	187	71	140	124
Tetanus.....	0	0	1	2	0	0	1	2
Trachoma.....	3	9	1	2	4	2	3	1
Trichinosis.....	0	0	0	0	0	0	0	1
Tuberculosis.....	244	226	148	188	269	197	244	164
Typhoid Fever.....	12	9	11	12	21	25	25	13
Typhus Fever.....	0	0	0	0	0	0	0	0
Whooping Cough.....	301	252	283	186	83	77	88	51
Totals.....	4204	3449	3488	2389	2026	1884	2095	1641

CALIFORNIA STATE PRINTING OFFICE